Salt River Fire Department Operating Guidelines

Hazardous Materials Weapons of Mass Destruction

Chemical, Biological, Radiological-- Response Operations

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Response actions at a Weapons of Mass Destruction (WMD) incident can be divided into those undertaken by operational responders and those undertaken or supervised by HAZMAT technicians. Medical management includes decontamination, triage, treatment, behavioral health and transportation. The specific WMD agent involved -- chemical, biological or radiological -- has an impact on scene management. All WMD terrorism incidents are crime scenes; police sector needs early establishment.

FIRST ARRIVING UNITS

The first arriving officer will establish Command and begin a size-up. Survey visible activity, signs and symptoms. Notice potential effects of wind, topography and location of the incident. Route other responding companies away from visible hazards.

Command will establish level II staging whenever possible. Care must be taken to establish staging in a safe area, taking into account the characteristics of the likely WMD agent (chemical, biological, radiological).

Area Isolation/ Perimeter Establishment

I. Command Size-up gathers information for incident management plan

- In known or suspected explosions when purposeful or terrorist activity cannot be ruled out (i.e., natural gas explosion) initial actions should be to secure a hot zone perimeter and call for PD to respond.
- Entry into the hot zone/crime scene should be under the direction of unified Command with Haz Mat – radiological monitoring, Tech Rescue – secondary collapse, and EOD secondary explosive devices/crime scene, issues being addressed.
- If victims are present, the Incident Commander should establish communication quickly to control their anxiety and behavior. Select a fire member/officer (preferably paramedic) as a point of communication to establish rapport and credibility. If possible, all direct communications to victims should be conducted/coordinated through this person.
- A WMD/terrorist incident is a CRIME SCENE. Once fire/hazmat work is complete, scene passes to FBI.
- Remember any signs of WMD devices, dispersion apparatus, or other potential evidence.
- BE AWARE OF SECONDARY DEVICES designed to injure additional victims and/or first responders. Upon sighting a device that appears operable, withdraw personnel until a Police Bomb Squad has inspected/rendered safe any suspicious appearing device.

- Remember locations of potential evidence; do not move or collect it yourself.
- Pay attention to symptoms exhibited by victims for relay to hazmat/paramedic personnel.
- Prepare to Evacuate nearby area if indicated by wind, explosive or similar danger.
- If fire is present and radiological agent suspected, evacuate to 2000 feet. Check downwind areas for contamination.

IN THE CASE OF LETTER OR PACKAGE CONTAINING UNKNOWN SUBSTANCE:

- Quarantine persons in the immediate area of exposure (office or room) and place them in a safe refuge area.
- Isolate the area that the substance or package is located; hold for Hazmat Team to double bag and secure.
- Control Heating and Air Conditioning (HVAC) Systems by shutting down to prevent spread of contamination.

DO NOT USE SPECIFIC NAME OF SUSPECTED AGENT OVER THE RADIO; USE ONLY ABIOLOGICAL AGENT@ OR AN UNKNOWN AGENT@.

If a biological agent is contained in a single room or office in a multi-function building, the building should be evacuated.

II. IF NO APPARENT VICTIMS, LIFE HAZARD, RESCUE SITUATION, OR FIRE EXISTS, FIRE DEPARTMENT PERSONNEL SHOULD NOT BE EXPOSED TO RISK.

First arriving units should secure a perimeter, evaluate the situation, and await the arrival of the Hazardous Materials Technicians.

- USE AVAILABLE PPE TO MINIMIZE SAFETY RISKS FOR OPERATIONAL RESPONDERS.
- Minimize entry of first responders into HOT ZONE.
- Minimum PPE is turnouts, butyl rubber gloves and SCBA.

III. Establish Zones of Limited Access.

- The **HOT ZONE** is the area immediately around the site/munitions/device/source. Enforce a single entry control point. All personnel entering this area must wear full protective gear. The entry control point should be a minimum of 300 feet from the source. This applies whether suspected agent is chemical, biological or radiological.

- The **WARM ZONE** is upwind and uphill from the Hot Zone for Chemical and Radiological Threats. Biological agents are non-volatile and controllable: if contained in a building little downwind threat is posed; if release point is in the open, downwind hazard may exist.

- Hot Zone Support, Rescue, and Technical Decon personnel operate in WARM ZONE with full protective gear. Decon lines are established in the WARM ZONE. This area should be minimally 15 feet wide, but must encompass all victims waiting decon and decon equipment. A LOBBY SECTOR will be established at the entry to the warm zone for accountability.

- The **COLD ZONE** is outside the Warm Zone. For Chemical and Radiological agents, COLD ZONE is uphill and upwind from Warm Zone. No contaminated personnel or equipment should pass into the COLD ZONE. Incident Command, medical and transportation are located in the COLD ZONE. Personnel should keep protective gear at hand in case of wind shift or accidental contamination.

IV. COORDINATE WITH POLICE TO ESTABLISH SECURITY FOR SITE

- Police will secure scene to insure safety for victims and emergency responders.

- Police will search immediate area for presence of secondary devices.

- If potentially, explosive devices are sighted or suspected, fire personnel will withdraw to safe staging area until safe re-entry is possible. Fire personnel will NOT move or disarm suspected devices.

- Victims and others will be denied entry and exit from HOT ZONE. Police will enforce these restrictions. Fire personnel will NOT use physical force to restrain public.

Equipment Positioning

Position equipment upwind, uphill and upstream from the incident site. If the incident is indoors, insure any ventilation exhaust ports are not blowing vapors into the established response areas. Shut down HVAC systems to minimize contamination spread.

Assess Downwind Hazards

Be aware of the presence of, or potential for downwind, plumes. This threat exists for chemical, biological and radiological [particles] agents. If a downwind hazard exists, initiate appropriate action (evacuation or shelter-in-place) for those at risk. Adjust incident perimeters to account for windage risks.

Gather Casualties/Initiate Victim Management

I. Immediately begin process of gathering ambulatory victims.

- Using an amplified PA system, direct victims to an established holding area to await evaluation and emergency gross decontamination.

- If deaths occur during sorting, redefine HOT ZONE perimeter to include bodies.
- Explain emergency decontamination to victims.
- Once emergency decon is complete, sort ambulatory victims into:
- People with Special Needs
- Gender groups
- Continue to process any additional victims who exit the impact area.

II. USE CAUTION [PPE] WHEN CONTACTING VICTIMS

- Those exposed to CHEMICAL agents may be off gassing.
- BIOLOGICAL victims may be contaminated with particles or droplets of agent.
- RADIOLOGICAL victims pose no danger; particles on skin or clothing brush or wash off.

III. NOTE LOCATIONS OF DEAD AT SCENE

- HOT ZONE perimeter should be defined to include all dead bodies.
- Unless absolutely necessary do not move bodies.

IV. NON-AMBULATORY VICTIMS SHOULD LIE IN PLACE

- If necessary administer emergency medical measures WHILE WEARING PPE.
- If external threat (building collapse, etc.) threatens, move victim(s) to safe area.

V. NOTE VICTIMS IN NEED OF RESCUE. Do not undertake rescue without PPE

VI. DEAD ANIMALS AND BIRDS AT THE SCENE

Deceased animals and birds at the scene will be handled as deceased people are handled, expanding the Hot Zone to include their locations. Once scene operations have concluded, Maricopa County Animal Control (MCAC) will be notified of the presence of deceased and contaminated animals.

Emergency Decontamination

I. Emergency decontamination for chemical agents should begin as soon as possible.

- Emergency Decon serves three functions:

- Marks victims for easy identification
- Removes product/particles from victims
- Engages victims in activity that reduces anxiety.
- Using PA system/bull horn, instruct victims on procedure:
- Spread arms and legs wide; turn slowly so all parts of body are rinsed; clothing is NOT removed for emergency decon unless patient was exposed to a liquid splash.
- Victims will be thoroughly wet using a booster line. Soak victims from top of head downward with copious amounts of water.
- In an event with multiple victims, which may inundate the booster line procedure of emergency decontamination, a master stream(s) creating a dense shower flow should be established as a more effective method of mass casualty emergency decontamination.

II. Minimum PPE for decontaminating victims is turnouts and SCBA.

III. Locate Emergency Decon corridor Upgrade from HOT ZONE if possible. Notice direction and impact of uncontrolled runoff for referral to clean up.

Note: Emergency decontamination is not necessary for biological and radiological contamination. ONLY victims who have other medical injuries that require immediate medical attention should be prioritized and decontaminated as necessary.